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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,466	01/21/2004	Carl J. Ledbetter	003797.00717	1396
28319	7590	07/25/2005	EXAMINER	
BANNER & WITCOFF LTD., ATTORNEYS FOR MICROSOFT 1001 G STREET, N.W. ELEVENTH STREET WASHINGTON, DC 20001-4597			LAO, LUN YI	
			ART UNIT	PAPER NUMBER
			2673	

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/760,466

Applicant(s)

LEDBETTER ET AL.

Examiner

Lao Y. Lun

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/26/2005 & 6/24/05
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 13 –15 are rejected under 35 U.S.C. 102(b) as being anticipated by Naoyuki(JP 2000-200147).

As to claims 13-15, Naoyuki teaches an input device for scrolling an image on a display comprising a housing and a scroll wheel(202 or 212) being rotatable relative to the housing about an axis to causing the image in a first direction(vertical direction, 200a, 200b or 210a, 210b) and the scrolling wheel being pivotally displaceable relative to the housing cause scrolling in a second direction(horizontal direction, 210c, 210d)(see figures 1-5 and paragraphs 8-14).

As to claim 15, Naouuki teaches the input device is a mouse(see figures 4-5).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Naoyuki(JP 2000-200147).

It would have been obvious to mounted a scrolling wheel on a keyboard since Naoyuki teaches a scrolling input device (850) could mounted on a keyboard(see figure 17 and paragraphs 70-71) and to eliminate a mouse input on a computer system.

5. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pruchniak(6,075,518) in view of Naoyuki(JP 2000-200147).

As to claims 1-8 , Pruchniak teaches an input device for scrolling on a display comprising a housing having at least one opening; a scroll wheel assembly(50, 54, 32, 40, 20, 24) having a rotating member(5) being rotatable about a first axis(54) and being pivotally movable about a second axis(22), the first axis and the second axis being perpendicular to each other; and a movement sensing system(60, 34) for sensing rotational movement of the rotating member(50) of the first axis and sensing pressured

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applied to the rotating member(50) for pivotal movement(see figures 1-2; column 3, lines 11-68 and column 4, lines 1-26).

Pruchniak teaches an input device for scrolling an image on a display on one direction(e.g vertical direction)(see figures 1-2 and column 1, lines 57-62). Pruchniak fails to disclose an teaches an input device for scrolling an image on a display on another direction(e.g. horizontal direction) which is perpendicular to the first axis.

Naoyuki teaches a scrolling wheel input device(202 or 212)for scrolling an image on a display along perpendicular axes(see figures 4-5 and paragraphs 8-14). It would have been obvious to have modified Pruchniak with the teaching of Naoyuki, since they both teach scrolling wheel input devices having rotation and pivot functions and Pruchniak! te s scrolling input device modified by Naoyuki would provide a scrolling input device for users to scroll images on a display in any direction as they want(see figures 4(A)-5(C) and paragraphs 8-14).

As to claim 4, Pruchniak teaches the scroll wheel assembly(50, 54, 40, 32, 20, 24) having a shaft member along the first axis and the rotation member(50) and shaft member being pivotally movable about the second axis(22)(see figures 1-2 and column 3, lines 20-55).

As to claim 6, Pruchniak teaches a shaft supporting system(54, 40, 32, 20, 24) for permitting shaft member and the rotatable member(50) to float within the housing(see figures 1-2 and column 3, lines 49-55).

As to claim 7, Pruchniak teaches the shaft supporting system(54, 40, 32 20, 24) having a pair of arms(40) for supporting a portion of the shaft(54) and a resilient

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member(32)positioned between each the cradle(20 or 24) and the housing for supporting a respective one of the cradles within the housing(see figures 1-2 and column 3, lines 20-55).

As to claim 8, Pruchniak teaches a scroll wheel assembly(50, 54, 40, 32, 20, 24) having a bracket(40)(see figure 1).

6. Claims 9-12 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pruchniak(6,075,518) in view of Naoyuki(JP 2000-200147).

As to claims 9-12 and 17-20, see the discussion of Pruchniak above. Pruchniak fails to control a scrolling speed correspond to the pressure sensing step.

Naoyuki teaches a scrolling input device for controlling the scrolling speed by sensing the pressure applied to the input device(see figures 1-6, 9-11; abstract and paragraphs 39-45). It would have been obvious to have modified Pruchniak with the teaching of Naoyuki, since to apply pressure on a scrolling device to control scrolling speed is more easy and precise than to use scrolling wheel rotation speed because controlling the wheel rotation speed is difficult to achieve by a finger manipulation.

As to claims 12, 19 and 20, Naoyuki teaches horizontal scrolling in response to the pivotally moving step(see figures 4-5 and paragraphs 8-14).

Response to Arguments

7. Applicant's arguments filed 4/26/2005 have been fully considered but they are not persuasive.

Applicant argues that Naoyuki's element(212) is not a scroll wheel on page 2. However, Naoyuki teaches element(202) is a scroll wheel(see figures 4(A)-4(C)) and paragraphs 8-9).

Applicant argues that Naoyuki does not teach of image scrolling with pivoting movement of element(202) on pages 2 and 5. The examiner disagrees with that since Naoyuki teach a scrolling wheel(202) can be controlled horizontal direction(longitudinal direction) as a stick(212) by the pivoting movement(see figures 4(C)-5(C) and paragraphs 8-14)).

Applicant argues that Pruchniak fail to disclose movement sensing system for sensing rotation movement of the rotatable member about the first axis and sensing pressure applied to the rotation member for pivotal movement on pages 3-4. The examiner disagrees with that since movement sensing system(60, 34) for sensing rotational movement of the rotating member(50) of the first axis and sensing pressured applied to the rotating member(50) for pivotal movement(see figures 1-2; column 3, lines 11-68 and column 4, lines 1-26).

Applicant argues that no motivation to combine Pruchniak and Naoyuki on page 3. The examiner disagrees with that since the motivation to combine those references has given by the examiner(see claims 1-8 rejection above).

Applicant argues that pruchniak does not teach image scrolling by pivoting movement. However, Pruchniak is not cited for teaching such feature, but Naoyuki does(see figures 4(A)-5(C) and paragraphs 8-14).

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Applicant argues that Pruchniak does not teach sensor for sensing lateral pressure on page 4. The examiner disagrees with that since Pruchniak teaches a sensor(34) for detecting the lateral pressure applied to the scrolling wheel(50) the switch(34) will be active when a predetermined lateral pressure applied to the scrolling wheel(50)(figure 1 and column 3, lines 36-45).

Applicant argues that Pruchniak and Naoyuki fail to disclose a step of sensing relative changes in lateral pressure applied to a rotated member on pages 5 and 6. The examiner disagrees with that since Naoyuki teaches a step of sensing relative changes in lateral pressure applied to a scrolling member(see figure 9-11 and paragraph 39-45) and Naoyuki teach a scrolling member would be a rotated member(see figures 4(A)-4(C)). Therefore, Naoyuki teaches a step of sensing relative changes in lateral pressure applied to a rotated member.

Applicant's argument of the combination of Pruchniak and Armstrong persuasive. The rejection 9-11 and 17-18 based on the combination of Pruchniak and Armstrong has been withdrawn.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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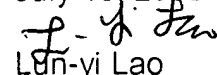
TWO MONTHS of the mailing date ! of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi Lao whose telephone number is 571-272-7671. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

July 18, 2005


Lun-yi Lao

Primary Examiner